

Amendments to the Specification:

1. Please **replace** the following amended paragraph for the pending paragraph beginning on page 13, line 1:

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The Image Sensor 102 converts the light rays it detects into electrical signals for image processing by an Image Reconstruction Electronics 103 and/or an image processing system such as General Purpose Computer 210 shown in Figure 2. The image formed on Image Sensor 102 is dependent upon the field of view covered by Optics 101. When Optics 101 is positioned directly below Image Sensor 102 (e.g., an optical axis of Optics 101 is normal to Image Sensor 102 and passes through a centroid of Image Sensor 102), also referred to as the "center position," then Camera 100 has a direct field of view. However, when Optics 101 is laterally displaced or offset from the center position in a plane orthogonal to the optical axis and/or parallel to Image Sensor 102, then Camera 100 has a shifted field of view. The amount that Lens 101 is offset from the center position is dependent upon the distance the lens is above area to be viewed and the focal lengths of the lens and the distance between the lens and the image sensor.

2. Please **replace** the following amended paragraph for the pending paragraph beginning on page 15, line 21:

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Figure 2 illustrates an Image Acquisition System 200 according to one embodiment of the present invention suitable for mosaicing camera images. For one embodiment of the present invention, Image Acquisition System 200 includes a General Purpose Computer 210 for performing image processing. The Hardware Components 202 include a Processor (i.e., CPU) 206, Memory 208 (ROM, RAM, etc.), Persistent Storage 210 (e.g., CD-ROM, hard drive, floppy drive, tape drive, etc.), User I/O 212, and Network I/O 214. The User I/O 212 can include a Keyboard 136, a Pointing Device ~~[[137]]~~ 138 (e.g., pointing stick, mouse, etc.), a Display 132, a Camera System 137 representing one or more video cameras, and a Translation Mechanism 106. The Network I/O 214 is a communications gateway to a Network 215 such as, a LAN, WAN, or the Internet.

3. Please **replace** the following amended paragraph for the pending paragraph beginning on page 16, line 10:

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The Software Modules 204 of General Purpose Computer 210 includes an Operating System 216 and various Application programs such as a Frame Merger Module 218, a Document Editing Module 220, and an Image Enhancement Module 222. The Operating System 216 permits Processor ~~[[205]]~~ 206 to control the various hardware devices such as Camera System 137 and Display 132.

4. Please **replace** the following amended paragraph for the pending paragraph beginning on page 18, line 3:

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Figure 3A illustrates a view (shown as view 1) of the upper left hand region of Area of Interest 300 and Figure 3B illustrates a view (shown as view 2) of the lower ~~[[left]]~~ right hand region of Area of Interest 300.

5. Please **replace** the following amended paragraph for the pending paragraph beginning on page 20, line 12:

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Figure 4A illustrates the position of Lens 410 within an x-y plane when capturing a view of the upper ~~[[right]]~~ left region of Area of Interest 300. Figure 4B illustrates the position of Lens 410 within a x-y plane when capturing a view of the bottom right region of Area of Interest 300. Arrows 450 and 460 illustrate the direction in which Lens 410 may be shifted, which corresponds to movement along the x-axis and y-axis, respectively.

6. Please **replace** the following amended paragraph for the pending paragraph beginning on page 21, line 17:

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Figures 7A and 7B illustrate perspective views of a line-scan camera system 700 according to one embodiment of the present invention positioned to record various views of an area of interest. More specifically, Figures 7A and 7B illustrate the positioning of Lens 710 with respect to Linear Sensor 720 to capture views 610 and 620, respectively. Arrow 750 illustrates the direction in which Lens 710 is

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moved (i.e., along the y-axis), which is perpendicular to the Linear Sensor 720. Continuous movement of Lens 710 is controlled by a single-axis translation mechanism such as mechanism 900 shown in Figure 9. For an alternative embodiment of the present invention, a dual axis translation mechanism may be used to move Lens 710 along two axes.
